

In the Claims:

Please amend Claims 8, 9, 11-14, 16, 18-20 and 22, all as shown below. Applicants respectfully submit that the amendments to these claims are being provided for purposes of clarity. Applicants respectfully reserve the right to prosecute any originally presented or canceled claims in a continuing or future application. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 – 7. (Canceled)

8. (Currently Amended) A method for allowing a user to select a quality of service for message delivery, comprising:

storing a selection of at least one of a first quality of service choice and a second quality of service choice for each user of an application server that employs a messaging service to deliver messages between a plurality of users, wherein the selection determines whether or not the user will be ensured of receiving the messages; receiving, to said application server, one or more messages and processing each of the one or more messages message received on a data stream using a single API of the messaging service;

segregating the plurality of users into a first group and a second group according to the selection of the quality of service choice associated with said each user such that users in the second group will be ensured of receiving the messages, while users in the first group will not be ensured of receiving the messages;

multicasting the message to the first group selecting the first quality of service wherein each user in the first group is not ensured of receiving said message;

sending the message directly to each user in the second group selecting the second quality of service via point-to-point protocol and ensuring that the user in the second group receives the message; and

receiving, by the messaging service of the application server, a response that delivers an acknowledgement of receipt of the message from the second group of users selecting

the second quality of service choice and receiving no acknowledgement from the first group of users selecting the first quality of service choice;  
wherein the application server transmits a single message by both (1) multicasting said message and (2) directly sending said message via the point-to-point protocol to multiple users.

9. (Currently Amended) A method according to claim 8, further comprising the step of filtering the messages received ~~by a user~~ by either quality of service.

10. (Original) A method according to claim 8, further comprising the step of providing a listener for each user to listen for messages on the user's behalf.

11. (Currently Amended) A method according to claim 8, further comprising the step of queuing messages sent to ~~a~~ the user by either quality of service to be delivered one by one to the user.

12. (Currently Amended) A method according to claim 8, further comprising the step of tagging each message with a sequence number so that ~~a user can tell if a message~~ that has been missed can be identified.

13. (Currently Amended) A method according to claim 8, further comprising the step of tagging each message so that ~~a user can tell~~ the data stream can be identified from which the message was received.

14. (Currently Amended) A method according to claim 9, further comprising the step of ~~allowing a user to select~~ receiving a selection of a filtering criteria to be used for the filtering.

15. (Previously Presented) A method for providing two qualities of service from a single data stream, comprising:

storing a selection of at least one of a first quality of service choice and a second quality of service choice for each of a plurality of users of an application server that employs a

messaging service to deliver messages between a plurality of users, wherein the selection determines whether or not each user will be ensured of receiving the messages;

receiving a message by the messaging service of the application server;

segregating the plurality of users into a first group and a second group according to the selection of the quality of service choice associated with said each user wherein users in the second group will be ensured of receiving the messages, while users in the first group will not be ensured of receiving the messages;

multicasting the message to the first group selecting the first quality of service wherein each user in the first group is not ensured of receiving said message;

sending the message directly to each user selecting the second quality of service via point-to-point protocol and ensuring that the user receives the message; and

receiving a response that delivers an acknowledgement of receipt of the message from the second group of users selecting the second quality of service choice and receiving no acknowledgement from the first group of users selecting the first quality of service choice;

wherein multicasting the data stream and transmitting the data stream utilizing the point-to-point protocol is performed such that a single message received to the system is transmittable via both qualities of service; and

wherein the messaging service of the application server will obtain an acknowledgement from the second group of users and will not obtain an acknowledgement from the first group of users based on said selection of quality of service choice associated with each user.

16. (Currently Amended) A method according to claim 15, further comprising the step of filtering the messages received ~~by a user~~ by either quality of service.

17. (Original) A method according to claim 15, further comprising the step of providing a listener for each user to listen for messages on the user's behalf.

18. (Currently Amended) A method according to claim 15, further comprising the step of

queueing messages sent to ~~a~~ the user by either quality of service to be delivered one by one to the user.

19. (Currently Amended) A method according to claim 15, further comprising the step of tagging each message with a sequence number so that ~~a user can tell if a message~~ that has been missed can be identified.

20. (Currently Amended) A method according to claim 15, further comprising the step of tagging each message so that ~~a user can tell~~ the data stream can be identified from which the message was received.

21. (Canceled)

22. (Currently Amended) A computer readable storage medium that stores a sequence of instructions for execution by one or more processors of a computer, said instructions causing the one or more processors to perform the steps of:

storing, into physical memory storage, a selection of at least one of a first quality of service choice and a second quality of service choice for each user of an application server that employs a messaging service to deliver messages between a plurality of users, wherein the selection determines whether or not the user will be ensured of receiving the messages;

receiving, to said application server, one or more messages and processing each of the one or more messages ~~message~~ received on a data stream using a single API of the messaging service;

segregating a plurality of users into a first group and a second group according to the selection of the quality of service choice associated with said each user such that users in the second group will be ensured of receiving the messages, while users in the first group will not be ensured of receiving the messages;

multicasting the message to the first group selecting the first quality of service wherein each user in the first group is not ensured of receiving said message;

sending the message directly to each user in the second group selecting the second quality of

second

service via point-to-point protocol and ensuring that the user in the group receives the message; and receiving, by the messaging service of the application server, a response that delivers an acknowledgement of receipt of the message from the second group of users selecting the second quality of service choice and receiving no acknowledgement from the first group of users selecting the first quality of service choice; wherein the application server transmits a single message by both (1) multicasting said message and (2) directly sending said message via the point-to-point protocol to multiple users.

23. (Canceled)

24. (Previously presented) A computer system comprising: a processor; object code executed by said processor, said object code configured to: store, into physical memory storage, a selection of at least one of a first quality of service choice and a second quality of service choice for each user of an application server that employs a messaging service to deliver messages between a plurality of users, wherein the selection determines whether or not the user will be ensured of receiving the messages; receive, to said application server, one or more messages and processing each message received on a data stream using a single API of the messaging service; segregate the plurality of users into a first group and a second group according to the selection of the quality of service choice associated with said each user such that users in the second group will be ensured of receiving the messages, while users in the first group will not be ensured of receiving the messages; multicast the message to the first group selecting the first quality of service wherein each user in the first group is not ensured of receiving said message; send the message directly to each user in the second group selecting the second quality of service via point-to-point protocol and ensure that the user in the second group receives the message; and

receive, by the messaging service of the application server, a response that delivers an acknowledgement of receipt of the message from the second group of users selecting the second quality of service choice and receive no acknowledgement from the first group of users selecting the first quality of service choice;  
wherein the application server transmits a single message by both (1) multicasting said message and (2) directly sending said message via the point-to-point protocol to multiple users.

25. (Canceled)

26. (Previously presented) The method of claim 8, wherein the step of ensuring that the user receives the message includes receiving a response which delivers an acknowledgment of the receipt of data from that user.

27. (Previously presented) The method of claim 15, wherein the step of ensuring that the user receives the message includes receiving a response which delivers an acknowledgment of the receipt of data from that user.

28. (Canceled)

29. (Previously presented) The computer program product of claim 22, further comprising:

computer code for receiving a response from each user selecting the second quality of service, which delivers an acknowledgment of the receipt of data.

30-31. (Canceled)